

ABSTRACT

A memory system includes a first plurality of memory cells, wherein each of the first plurality of memory cells includes a first node and a second node that are configured to have opposite logic values, and a second plurality of memory cells, wherein each of the second plurality of memory cells includes a first node and a second node that are configured to have opposite logic values. Providing a pre-program data value to the first nodes of the first plurality of memory cells, and to the second nodes of the second plurality of memory cells enables the memory system to be pre-programmed.